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### (54) **ULTRASONIC DIAGNOSIS TREATMENT SYSTEM**

#### (57) Abstract:

**PROBLEM TO BE SOLVED:** To construct a system which can emit ultrasonic waves when a thrombus is dissolved by a thrombolytic agent and can perform an ultrasonic diagnosis after the thrombus treatment.

**SOLUTION:** An ultrasonic probe 10 has a piezoelectric transducer 14 for diagnosis at the tip of a torque wire 32 and a piezoelectric transducer 12 for treatment on the tip face of the piezoelectric transducer 14. A thrombolytic agent is introduced near a thrombus 40 and ultrasonic waves are simultaneously emitted from the piezoelectric transducer 12 for treatment to the thrombus 40. After the treatment, the torque

wire 32 is rotated and an ultrasonic beam generated by the piezoelectric transducer 14 for diagnosis radially scans, thereby performing an ultrasonic diagnosis. An actuator which has the piezoelectric transducer for diagnosis and itself can be bent may be also provided in the ultrasonic probe.

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